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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* AXEL GESELL, ROBERT KRAUS, and ANDREAS HAMMER

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Appeal 2018-004396  
Application 14/784,612  
Technology Center 2800

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Before DONNA M. PRAISS, N. WHITNEY WILSON, and  
JAMES A. WORTH, *Administrative Patent Judges*.

PRAISS, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>2</sup> appeals from the Examiner's decision to reject claims 1–7, 9–12, 14, and 15. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM-IN-PART.

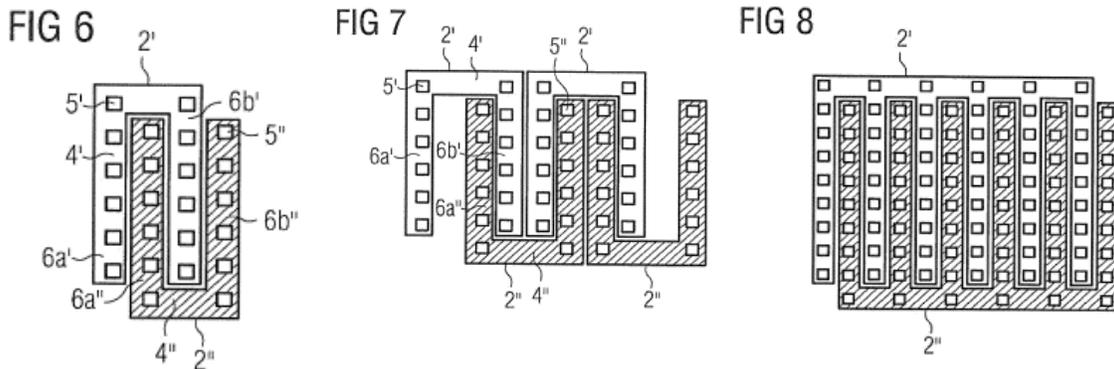
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<sup>1</sup> In this Decision we refer to the Specification filed Oct. 15, 2015 (“Spec.”), the Final Office Action dated Mar. 31, 2017 (“Final Act.”), the Appeal Brief filed Sept. 8, 2017 (“Appeal Br.”), the Examiner’s Answer dated Jan. 30, 2018 (“Ans.”), and the Reply Brief filed Mar. 22, 2018 (“Reply Br.”).

<sup>2</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as OSRAM Gesellschaft mit beschränkter Haftung. Appeal Br. 2.

### STATEMENT OF THE CASE

The invention relates to a lighting system, and, more particularly, a lighting system comprising an electrical component for operating the lighting means of a lighting module wherein the electrical component is directly fastened to the lighting module. Spec. 1:11, 2:16–35. The Specification discloses that the lighting means can be in the form of a light-emitting diode (LED) arranged on a printed circuit board and that a plurality of lighting means may be arranged on a U-shaped printed circuit board with the electrical component being in the form of a ballast arranged between two parallel webs of the U-shaped printed circuit board. *Id.* at 10:17–26, Fig. 1. According to embodiments depicted in Figures 6–8 and described in the Specification, the recess delimited by the U-shaped printed circuit board can engage other lighting module(s). *Id.* at 13:4–14:10; Figs. 6–8. Figures 6–8 are shown below.



Figures 6–8 are schematic illustrations of arrangements of a plurality of lighting modules. *Id.* at 9:16–21.

Independent claims 1 and 12, reproduced below from the Claims Appendix to the Appeal Brief, are illustrative of the subject matter on appeal (indentations and paragraphing added).

1. A lighting system, comprising:
  - at least one lighting module which has a printed circuit board and at least one light-emitting element arranged on the printed circuit board, and
  - at least one electrical component for operating the light-emitting element of the lighting module,
  - wherein the electrical component is electrically connected to the lighting module, and
  - wherein the electrical component is directly fastened to the lighting module, wherein there is no gap between the lighting module and the electrical component.
12. A lighting system having at least one first lighting module, and a second lighting module,
  - wherein both lighting modules each have at least one printed circuit board with a U-shaped recess, and
  - wherein the lighting modules are formed in such a manner that at least one web of one of the two lighting modules, which delimits the at least one U-shaped recess, is engaged in at least one U-shaped recess in the second lighting module;
  - wherein the first lighting module is electrically connected to the second lighting module via a plug connection at the point where the two lighting modules are engaged.

#### ANALYSIS

We review the appealed rejections for error based upon the issues Appellant identifies, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) *cited with approval in In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections.”)). After considering the argued claims in light of the case law presented in this Appeal and the

positions of both Appellant and the Examiner, we are persuaded of reversible error in the Examiner's rejection of claim 1 and claims dependent thereon, but we are not persuaded of reversible error in the Examiner's rejection of claim 12 and claims dependent thereon. Each rejection is addressed below.

*Rejections 1 and 2: Anticipation by Hu*

The Examiner rejects claims 1–7, 9, and 10 under 35 U.S.C. § 102(a) as anticipated by Hu<sup>3</sup> for the reasons provided on pages 4–6 of the Final Action. The Examiner identifies Hu's positioning member 22 in Figure 2, which is described by Hu as “an electrical conductor,” as the “electrical component” recited in claim 1. Final Act. 4 (citing Hu Fig. 2); Hu ¶ 28. The Examiner further finds that Hu's Figure 2 discloses the limitations of claims 2–5 and 10, which depend from claim 1. Final Act. 4–5. The Examiner also finds that Hu's Figures 5 and 6 disclose the limitations of claim 1, and specifically, that the recited “electrical component” is disclosed by Hu's base 12 (comprising carrier board 26 and connector 44). *Id.* at 5. The Examiner finds that claims 6, 7, 9, and 10, which depend from claim 1, are also disclosed by Hu's Figure 5. *Id.* at 5–6.

We are persuaded by Appellant's argument (Appeal Br. 2) that the Examiner reversibly erred in rejecting independent claim 1 as anticipated by Hu because the Examiner has not made a finding that that the “electrical component” identified in Hu's Figures 2, 5, or 6 “operat[es] the light-emitting element of the lighting module” as claim 1 requires. Accordingly,

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<sup>3</sup> US 2012/0170261 A1, published July 5, 2012.

we reverse the Examiner's rejections of claims 1–7, 9, and 10 as anticipated by Hu.

“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992) (emphasis omitted).

“[A]nticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim . . . .” *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) (citing *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1457 (Fed. Cir. 1984)).

“[A]bsence from the reference of any claimed element negates anticipation.” *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986); see *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (“[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.”)

In the Answer, the Examiner finds that Hu's “positioning member 22 is not only providing the mechanical link, but also carry[ing] the electricity and perform as electrical component, and thus intended function of the electrical component 22 or 12 does not alter.” Ans. 3. However, the Examiner makes no finding that components 22 or 12 of Hu operate the light emitting element of the lighting module as required by claim 1, or that carrying electricity is sufficient to “operate” the light emitting element of the lighting module. Accordingly, we reverse the Examiner's rejections of claims 1–7, 9, and 10 under 35 U.S.C. § 102(a) as anticipated by Hu.

*Rejection 3: Anticipation by Lee*

The Examiner rejects claims 12 and 15 under 35 U.S.C. § 102(a) as anticipated by Lee<sup>4</sup> for the reasons provided on pages 6–7 of the Final Action.

Appellant contends that the Examiner erred in finding that Lee anticipates claim 12 because “Lee does not show a connection between two U-shaped lighting modules, but rather links a series of L-shaped sections which form a single lighting module.” Appeal Br. 13. Appellant does not separately argue the patentability of dependent claim 15. *Id.* at 12–14. Therefore, claim 15 stands or falls with independent claim 12 from which it depends. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner responds that Lee’s method of linking its circuit board segments is not limited to L-shaped sections linked to each other, but also adjacent U-shaped sections can be joined by the plug shown in Lee’s Figure 7. Ans. 4. The Examiner cites the embodiment shown in Lee’s Figures 3 and 4 as showing two circuit boards with U-shaped recesses that can be assembled. *Id.*

In the Reply Brief, Appellant asserts that the lighting modules shown in Lee’s Figures 3 and 4 as engaged with each other are not disclosed to be electrically connected to each other as required by claim 12. Reply Br. 3–4. Appellant contends that because Lee does not discuss the connection between the two substrates, the Examiner has not shown that Lee’s two substrates are connected together. *Id.*

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<sup>4</sup> US 2010/0265711 A1, published Oct. 21, 2010.

We are not persuaded by Appellant that the Examiner reversibly erred in rejecting independent claim 12 as anticipated by Lee on the basis that the Examiner has not shown that the modules identified in Lee's Figures 3 and 4 are "electrically connected" to each other "via a plug connection at the point where the two lighting modules are engaged" as claim 12 recites. Appellant acknowledges that the modules shown in Lee's Figures 3 and 4 are "engaged" as recited in claim 12 (Reply Br. 4). Appellant does not dispute the Examiner's finding (Ans. 4) that Lee teaches a plug connection between sections as shown in Lee's Figure 7. Appellant's assertion (Reply Br. 4) that Lee does not disclose a plug connection between two modules with U-shaped recesses is not supported by the record. Regarding Figures 3 and 4 cited by the Examiner, Lee discloses that the odd numbered rows form one substrate group and the even numbered rows form a second substrate group such that two daughter substrates are formed. Lee ¶ 19. Lee further discloses that the two daughter substrates can be separated from each other (providing the benefit of no scrap material and saving processing time by simultaneously processing two substrates) and also "connected as one piece by the connecting sections." *Id.* ¶ 20.

Accordingly, we affirm the Examiner's rejection of claims 12 and 15 under 35 U.S.C. § 102(a) as anticipated by Lee.

*Rejections 4 and 5: Obviousness*

The Examiner rejects claim 11 under 35 U.S.C. § 103(a) over the combination of Hu and Lee for the reasons provided on page 8 of the Final Action. Claim 11 depends from claim 1 and further requires that the printed circuit board of the lighting module is U-shaped. The Examiner finds that

Hu teaches all of the limitations of claim 11 except for the printed circuit board of the lighting module is U-shaped. Final Act. 8. Because we find that the Examiner’s rejection of claim 1 is not supported by the record cited in this Appeal for the reasons discussed above in connection with claim 1, we likewise reverse the rejection of claim 11 for the same reasons.

The Examiner also rejects claim 14 under 35 U.S.C. § 103(a) over the combination of Lee and Cobb<sup>5</sup> for the reasons provided on pages 8–9 of the Final Action. Because Appellant does not identify error in the Examiner’s rejection of claim 14, we affirm the Examiner’s rejection of claim 14 under 35 U.S.C. § 103(a).

### CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1–5 and 10	§ 102(a)(1) Hu		1–5 and 10
1, 6, 7, 9, and 10	§ 102(a)(1) Hu		1, 6, 7, 9, and 10
12 and 15	§ 102(a)(1) Lee	12 and 15	
11	§ 103 Hu and Lee		11
14	§ 103 Lee and Cobb	14	
<b>Overall Outcome</b>		12, 14, and 15	1–7 and 9–11

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

### AFFIRMED-IN-PART

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<sup>5</sup> US 8,307,547 B1, issued Nov. 13, 2012.